



Indoor Air Quality Tools for Schools Program

Indoor Air Quality (IAQ)

INDOOR AIR QUALITY TOOLS FOR SCHOOLS UPDATE

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News and Events

- **Upcoming Webinar! Your Regional Resources for Developing an *IAQ Tools for Schools* Award Application Thursday, May 14, 2009, at 2 pm ET.** Make your efforts to develop healthy school environments known in your community by applying for an *IAQ TFS* Award! Attend this Webinar to discover the resources available in your local area that will help you develop an *IAQ TFS* Award-winning application. You will be introduced to your EPA Regional representatives—school IAQ experts located throughout the country that offer individualized assistance and support for school environmental health initiatives at the local level. [Register today!](#)
- Learn how to reduce the burden of asthma in your school and community — register today for EPA's ***Communities in Action for Asthma-Friendly Environments*** [National Asthma Forum](#) being held June 4-5, 2009, in Washington, D.C.
- **Visit the *IAQ TFS* Program booth at the National Association of School Nurses 41st annual conference!** The [National Association of School Nurses \(NASN\) annual conference](#) takes place at the Boston Seaport World Trade Center from June 25-28, 2009, and the *IAQ TFS* Program will be there! This year's NASN conference theme is "Transforming School Communities: Partners for Student Success." Stop by the IAQ booth for free guidance materials, EPA resources that can help you integrate the conference theme, or just to chat. Dr. Lani Wheeler and colleagues will present an *Indoor Air Quality Tools for Schools* poster on Thursday and a *2009 Update on School-based Asthma Management* on Friday and Saturday. See you there!
- **A new educational video, *Safe Chemical Management in Your School*, has just been released!** The U.S. EPA has teamed up with schools and community partners in Rhode Island, Colorado and Wyoming to bring models of responsible chemical management programs to schools across the country with the release of a new educational video, *Safe Chemical Management in Your School*. [Get more information on responsible chemical management in schools and watch the new video!](#)

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Children's Mercy Hospital: Combating Asthma in School

More than four years ago, Dr. Jay Portnoy of Children's Mercy Hospital (CMH) in Kansas City, Missouri, began identifying a trend among some of his asthma patients—patients who, despite strict medication regimens, had uncontrolled asthma. Dubbed "frequent fliers" to the emergency department (ED), Dr. Portnoy realized that something external had to be the cause of these children's symptoms. Not long after, CMH created an [Environmental Health Program](#), designed to identify and reduce the environmental exposures that were triggering frequent fliers' asthma.

In 2005, CMH won EPA's prestigious National Environmental Leadership Award in Asthma Management for the outstanding results of the Environmental Health Program's home interventions for asthma patients. But, there is more to the story: Though CMH started in children's homes, they quickly realized that to address chronic asthma effectively, they needed to attack the sources of environmental triggers on another major front - children's schools.

That's where Luke Gard, an environmental hygienist and member of CMH's Environmental Health team, came in. To help schools manage their indoor environments and become asthma-friendly, Gard created a multi-layered Environmental Health Assessment for schools that aims to improve school indoor environments, reduce the prevalence of asthma episodes at school, and create a sustainable framework for changes in the school environment. The Environmental Health Assessment includes: a staff health questionnaire and building/room quality questionnaire administered before any qualitative or quantitative observations take place; a preliminary assessment conducted with a school building team, during which visual observations are supported by detailed notes and photographs; and finally, quantitative measurements of school rooms while they are vacant and occupied.

Gard translates the Environmental Health Assessment into scores for both qualitative and quantitative measures of health in each school room. This unique rating system allows the two major school room operators, teachers and facilities and maintenance staff, to take ownership over IAQ-related areas they have most control over. For example, a teacher can see that he or she must address a stack of books blocking an air vent and a facility staff person can see that he or she needs to change the room's air filters more often.

The Environmental Health Assessment comes into focus when Gard creates a detailed Summary Report showing his findings for the school. The report includes detailed notes and photographs, health data when available, and corroborating or contradictory qualitative evidence of potential health issues. To date, Gard has created assessments for more than 1,200 school rooms and hopes that one day he can transform all of this data into a predictive model. This model will help schools quickly identify major issues that could be at play in their indoor environments, and factors for school environmental management program success and sustainability. Ultimately, the Environmental Health Assessments assist schools in helping their students with asthma transform EDs from frequent flier zones into no-fly zones.

To learn more about CMH's Environmental Health Program, [visit their Web site](#).

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Insight into Excellence: Charlotte-Mecklenburg Schools

For Charlotte-Mecklenburg Schools, the phrase "We are proactively looking for problems..." exemplifies their comprehensive approach to IAQ issues. CMS' IAQ management program is part of their coordinated school health approach, which is structured to ensure that the physical conditions of the school building nurture the well-being of students and staff, and that students and staff have the health education and support services they need to proactively address their own health. With nearly 30 percent of children in CMS reporting asthma or asthma symptoms, Charlotte-Mecklenburg's proactive, multi-faceted approach is especially pivotal in creating healthy places to learn.

CMS' IAQ management plan tackles the environmental components of school health, including green cleaning protocols; strict bans on common asthma triggers, such as room fragrances; and responding to and tracking trends in occupant complaints and nurse visits. CMS also offers extensive staff training opportunities and student and staff education programs. It is this dynamic combination that defines their Excellence Award-winning success. Aside from the strict protocols they instituted for managing asthma triggers, CMS also offers students and parents an asthma education series to help them learn about environmental asthma triggers that may be present in their homes and to help them create asthma action plans with the school. More important than an award, CMS' efforts have won them healthier, happier and more productive staff and students.

What makes your school IAQ management program excellent? Apply for the National Excellence or National Model of Sustained Excellence award to share your success story. The 2009 application period will launch

soon. In the meantime, check out the [Awards Web site](#) to learn more. And, don't forget to [register for the upcoming Awards Webinar](#). **Your Regional Resources for Developing an *IAQ Tools for Schools* Award Application** on Thursday, May 14, 2009, at 2 pm ET.

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Checklist: Managing Asthma in Schools

Help manage asthma in your school with these tips for controlling asthma triggers — investigate before you forget!

- **Eliminate [Secondhand Smoke Exposure](#)** – Enforce no-smoking policies in the school.
- **Reduce [Dust Mite Exposure](#)** – Dust and vacuum your school rooms thoroughly and regularly.
- **Clean Up Mold and Control Moisture** – Control the indoor climate to prevent mold growth -manage humidity, clean up spills and prevent moisture condensation. Learn about the [formula for mold growth](#).
- **Control Cockroach Allergens** – Use [integrated pest management \(IPM\)](#) practices to prevent cockroach and other pest problems (e.g., store food in tightly sealed containers and place dumpsters away from the building).
- **Control Animal Allergens** – Remove furry classroom [pets](#) from the school, if possible. If not, relocate pets away from sensitive students and ventilation systems.

For long-term results, put a program in place to manage asthma year round!

- **Use the [IAQ Tools for Schools Action Kit](#)** – Help people with asthma by reducing triggers and improving the school environment with the good IAQ practices recommended in this kit.
- **Develop an Asthma Management Program in Your School** – Include school policies on inhaler and medication usage, and emergency procedures for school staff when a student has an asthma attack. Obtain the U.S. Department of Health and Human Services, National Institutes of Health, and the National Heart, Lung, and Blood Institute's [Managing Asthma: A Guide for Schools](#). Updated [National Asthma Education and Prevention Program \(NAEPP\) sample emergency protocols and other materials](#) are also available.
- **Provide School-Based Asthma Education Programs** – Contact your local American Lung Association about [Open Airways](#), or the Asthma and Allergy Foundation of America about [Power Breathing](#). These are school-based asthma management programs for students with asthma.
- **File Student Asthma Action Cards** – Make sure students with asthma obtain and turn in copies of their [action cards](#) to the school nurse. Encourage students and their caregivers to identify their asthma triggers and steps they can take to reduce these triggers.
- **Gather Additional Asthma Information and Resources** – [Partner with a community organization](#) near your school and establish a complete file on existing asthma and allergy-related [information sources](#) to reference throughout the school year.

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Have Your Questions Answered!

Is there a topic you want to see covered in an *IAQ TFS* Update? Need more information or have a quick question? Do you have suggestions for a Webinar, an Update feature, or are you simply curious about an IAQ topic and would like more information? If so, send us an e-mail at IAQTfSConnector@cadmusgroup.com.

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Share YOUR news and events! Send us information to share with the school IAQ community. It could be featured in the next Update. E-mail your news to IAQTfSConnector@cadmusgroup.com.

If you like what you're reading, maybe a friend or colleague would, too — forward this e-mail! To subscribe to *IAQ TfS* Update, send an e-mail to IAQTfSConnector@cadmusgroup.com with "subscribe" in the subject line.

The *IAQ TfS* Program is a comprehensive resource to help schools maintain a healthy environment in school buildings by identifying, correcting and preventing IAQ problems. Learn more about the *IAQ TfS* Program at www.epa.gov/iaq/schools.

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